



PAITA

Qcut 150 A



**FLEXIBLE AND EASY TO HANDLE** 

PRECISION CUT-OFF MACHINES
WITH HIGHEST ACCURACY





# MANUAL PRECISION CUT-OFF MACHINE

# **QCUT 150 M**

- I Precision cut-off machine
- I Solid stainless steel housing, powder coated
- I Manual Y-axis (vertical movement)
- Swivel arm with variable load
- Manual Z-axis with scale
- I Variable speed
- I Table attachment (accessory)
- I 4 different cooling systems availabe
- I LED illumination of cutting chamber
- I Soft-closing hood

### **Qcut 150** M

The Qcut 150 M is a manual precision cut-off machine with manual cross feed and cutting discs up to a size of 203 mm / 8 ".

Both the cutting force and the speed of the cutting disc are infinitely adjustable. With different operating modes and cooling systems, a very wide range of applications and materials can be covered. The user-friendly fastening system for the clamp arm, specimen holder and table top is designed in such a way that they can be changed toolfree.

A wide range of different clamping devices enables versatile use.



#### **FUNCTIONAL DESIGN**

The powder-coated stainless steel housing is the stable basis of the compact precision cut-off machine. The robust machine design integrates many clearly and ergonomically positioned functions. The cutting chamber, which is equipped with LED lighting, is covered with a transparent protective hood with a soft-close function.



### ADJUSTABLE PARAMETERS FOR VERSATILE APPLICATION

The rotations speed of the precision cutting wheel is infinitely variable adjustable in the range of 150 - 3000 rpm using the rotary knob. Therefore diamond cutting wheels, diamond cup wheels and corundum cutting wheels can be used for a wide variety of applications. The cutting process is started and ended with the QATM start-stop button.



#### **VARIABLE CUTTING FORCE**

The cutting force can be set manually depending on the sample geometry and sample material, which ensures precise and deformation-free cutting of particularly sensitive materials and samples.



#### **MANUAL Z-AXIS**

The Qcut 150 M is equipped with a manual Z-axis. For parallel cuts or defined grinding with a diamond cup wheel, the specimen can be fed up to 25 mm across.



# AUTOMATIC PRECISION CUT-OFF MACHINE

# **QCUT 150 A**

- Up to 5 different modes: manual, automatic feed, forcecontrolled feed, grinding mode, cutting with table attachment (depending on machine configuration)
- I Manual cross feed
- I Zone cutting function
- I 4 different cooling systems available
- I Dressing device
- I Intuitive QATM software with integrated database

### **Qcut 150** A

The Qcut 150 A is a flexible precision cut-off machine which is used with cut-off wheels up to a diameter of 203 mm/8".

The compact benchtop model performs automatic as well as manual cuts with the ergonomic lever. The optional clamping arm with built-in force sensor ensures low-deformation cuts due to a precise force-controlled feed rate.



#### **FORCE-CONTROLLED CUTTING**

The cutting force gets precisely controlled by an integrated force-sensor. It keeps the cutting force constant by adjusting the feed rate automatically throughout the cutting process.



#### **TABLE ATTACHMENT**

With the tool-free mountable table attachment PCBs, plate material or large samples can be quickly sectioned manually.



#### **ZONE-CUTTING**

The new functionality "zone cutting" allows for setting feed rate or cutting force individually for single sections of the specimen for one cutting operation. Material deformation and warming are thus reduced, making the cutting process more effective.



#### 4.3" TOUCHSCREEN

The proven QATM-software on the 4.3" touchscreen contains a consumable and program database which allows also to create individually set user profiles.



#### **GRINDING MODE**

In grinding mode, samples can be grinded down with a cup wheel manually or semi-automatically (Target preparation).



Suitable clamping devices for every component



Vacuum sample holder



Rotating device with reducing ring for embedded samples





Universal clamping device



Double parallel vice



Drop shape sample holder



Matrix clamping device



Mini vice



Adaptor with ball joint

# ACCESSORIES AND CLAMPING DEVICES FOR QCUT 150 M AND QCUT 150 A

#### **CLAMPING DEVICES**

Besides standard sample holders there are special clamping devices available for various applications. (see listing on the left). All clamping devices are available in two different sizes and very easy to apply.

#### **TABLE ATTACHMENT**

The optional table attachment for Qcut 150 A is ideal for fast cutting of PCB's, sheet material or large samples. It is supplied incl. angle stop (fixed 90°), rip fence and small splash guard. An adjustable angle stop is available as an accessory.

#### **COOLING SYSTEMS**

With the 4 different cooling systems, a very wide range of applications and materials can be covered:

- I Cut-off wheel immersion cooling
- I Circulation cooling 15 L with filter
- I Circulation cooling 45 L
- I Fresh water cooling system

#### **MODULAR ROTATION AXIS**

The rotary axis (speed range 5-30 rpm) can be equipped with additional equipment:

- I Manual chuck Ø 32/44 mm
- I Reducing ring for round and embedded samples



# TECHNICAL DATA



Cut-off wheel	Ø 75 - 203 mm/8"	Ø 75 - 203 mm/8"
Variable speed	150 - 3000 rpm	150 - 3000 rpm
Max. cutting capacity	Ø 40 mm	Ø 40 mm
Arbour size	Ø 12.7 mm	Ø 12.7 mm
Variable adjustable cutting force	0 - 10 N	0 - 10 N
Feed	manual	0.01 - 20 mm/s (automatic))
Y-axis (vertical movement)	120 mm (manual)	120 mm (manual / automatic))
Z-axis (paralell cut)	25 mm (manual)	25 mm (manual)
Position accuracy Z-axis	manual	0.005 mm
Motor power	0.37 kW (S1)	0.37 kW (S1)
Connection power	0.75 kVA	0.75 kVA
Dimensions W x H x D	591 x 391 x 590 mm	545 x 391 x 566 mm
Weight	45 kg (dep. on equipment)	45 kg (dep. on equipment)



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PREMIUM QUALITY

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